

New format
coming soon.
Check the Message to
Members for details.

California Academy of Sciences'

Member Newsletter

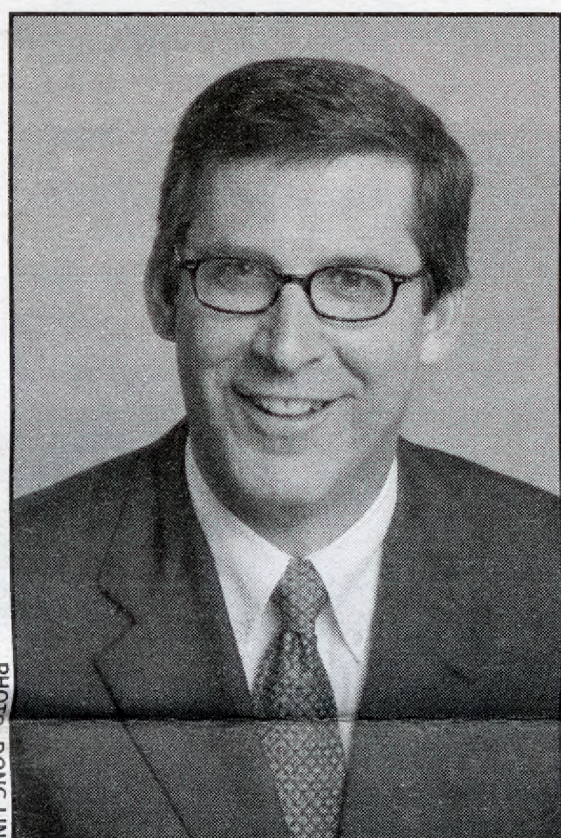
Fall 2005

Academy

Open Every Day 10AM-5PM

MESSAGE TO MEMBERS

The Academy's mission is to explore, explain, and protect the natural world, and we are currently striving to meet those goals in a number of different ways. Our scientists are working to fulfill the exploration portion of our mission in a wide range of locales around the world, including Madagascar, Myanmar, and Marin County. Meanwhile, we are addressing the other two aspects of our mission by inspiring our visitors with



Executive Director Patrick Kociolek, Ph.D.

museum experiences that are as personal as possible. For the next few months, we will be offering an expanded array of aquarium programming that will allow our visitors to interact more closely with both the animals and biologists of Steinhart Aquarium. From scheduled fish feedings and coral reef dives to "Meet the Biologist"

sessions and the ever-popular penguin feeding shows, we are making sure that each visitor has an "Up Close and Personal" experience.

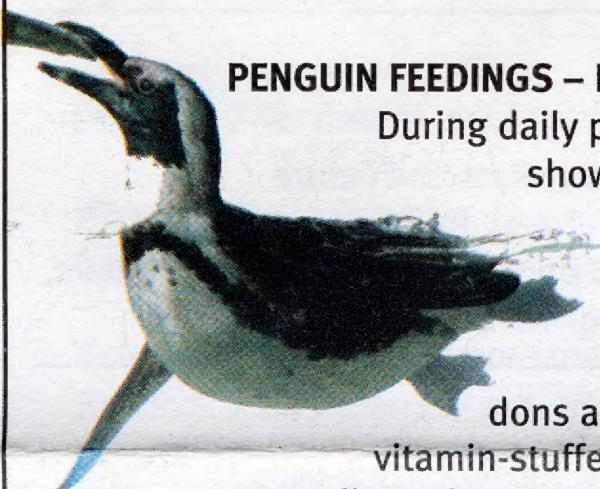
In addition to inspiring our visitors to protect the natural world, we are implementing some new internal policies to underscore our commitment to resource conservation. We have established an internal Green Team to identify creative ways to conserve energy and resources within the 875 Howard Street building, and we are reevaluating the production and mailing of all of the paper products that are mailed from the Academy. Beginning in October, we will take a big step toward reducing our paper and resource consumption by combining the members' newsletter with the Academy's magazine, *California Wild*. Since both publications are mailed to our members quarterly, this seemed like a natural step to take. Next month, the information about exhibits and events you have come to rely on in the Academy newsletter will appear as an insert in the Fall 2005 issue of *California Wild* – look for it near the back of the magazine. If you'd like to receive monthly reminders about upcoming Academy events as well, you can sign up to receive our electronic newsletter, *Academy Bytes*, by sending an email to info@calacademy.org.

We have enjoyed seeing so many of you over the summer at our *Chocolate* exhibit and accompanying programs. If you haven't seen the exhibit yet, you still have a few more days – *Chocolate* runs through September 5. We hope to see you again soon.

– Patrick Kociolek, Ph.D.
Executive Director

Up Close and Personal at Steinhart Aquarium

This fall, rediscover Steinhart Aquarium and come face-to-face with penguins, piranhas, pythons, pipefish, and thousands of other aquarium animals. Slither through SSsssnake Alley, get your hands wet at the Discovery Tide Pool, find Nemo in the two-story Coral Reef tank, and enjoy a variety of programs designed to help you get a closer look at the aquarium's inhabitants, including scheduled penguin feedings and Coral Reef dives. Meet aquatic biologists as they care for thousands of Steinhart Aquarium animals, and learn about the natural world through hands-on activities.



PENGUIN FEEDINGS – EVERY DAY

During daily penguin feeding shows, visitors may watch and ask questions as one of the Academy's aquatic biologists dons a wet suit and tosses vitamin-stuffed herring and capelin to the penguins. Each feeding takes 20 minutes. **11 am & 3:30 pm**

FISH FEEDING FRENZY – FRIDAYS THROUGH SUNDAYS

Watch as an Academy biologist feeds some of your favorite Steinhart residents. Scheduled feedings take place twice a day every Friday, Saturday and Sunday. **10 am & 2 pm**



SEE THE UNSEEN – EVERY DAY

Join an Academy naturalist for a hands-on activity featuring little-seen treasures from the Academy's specimen collection or fascinating live animals. **12 pm**

CORAL REEF CARETAKING – MONDAYS & WEDNESDAYS

Watch as an Academy biologist suits up in SCUBA gear and dives into the Academy's two-story Coral Reef tank to care for the reef's inhabitants. During this 20-minute dive, the biologist will clean the tank windows and feed the anemones and fish. A second biologist will be on hand to answer questions. **2 pm**



MEET THE BIOLOGIST – TUESDAYS & THURSDAYS

Meet an Academy biologist and discover how to care for aquarium creatures. Depending on the animal you visit, you may learn how to take and test water samples, check filters, clean tanks, or administer appropriate amounts of food. **2 pm**



I Spy Halloween Hotspot 14th Annual Halloween Party

Crack the clues in a scientific treasure hunt, decorate a pumpkin, make your own Halloween mask and trick or treat with Academy scientists at the California Academy of Sciences' fourteenth annual Halloween costume party. Fun activities and entertainment for children and adults will keep you in the Halloween spirit on **October 28, 2005**.

Always a popular event, visit your favorite animal friends at Steinhart Aquarium and other familiar exhibits throughout the museum. Join in the fun at **I Spy Halloween Hotspot** and catch a glimpse of the Academy's upcoming exhibit, *HOTSPOT: California on the Edge*. The exhibit, which opens to the public on Saturday, November 19, will provide Academy visitors the opportunity to discover the spectacular diversity that exists within California, and learn what can be done to help protect it. Plan to attend this year's party and enjoy an evening of delicious food, entertainment, and activities for kids of all ages.

Friday, October 28, 6:30-9 pm



For more information, call Marlene Dabis at (415) 321-8405 or e-mail mdabis@calacademy.org.



Last day of the
Chocolate Exhibit
is Monday, September 5!

2 SEPTEMBER

All programs take place at the Academy at 875 Howard Street, unless otherwise noted in bold.
All programs are free with admission, unless otherwise noted.

2 FRIDAY

Creature Feature Story Time

Join us for a story-reading session about an Academy animal. Then, see the real thing as you meet a live animal or examine a scientific specimen. Appropriate for ages 3–5. **10:30 am, Nature Nest.**

Water in the Universe

Take a deeper look at the Academy's *Astrobiology* exhibit during these special, spacey presentations. Learn why water is a necessary component for the evolution of life and find out where else in the Universe it might exist. **1 pm, 2nd Floor.**

Science Illustration Demonstration

Watch an illustrator create images for use in scientific publications. **3 pm; Naturalist Center.**

3 SATURDAY

Creature Feature Story Time

Join us for a story-reading session about an Academy animal. Then, see the real thing as you meet a live animal or examine a scientific specimen. Appropriate for ages 3–7. **10:30 am, Naturalist Center.**

Water in the Universe

See Sept. 2 for details. **1 pm, 2nd Floor.**

4 SUNDAY

Water in the Universe

See Sept. 2 for details. **1 pm, 2nd Floor.**

5 MONDAY

Last day of *Chocolate* Exhibit

Don't miss out on the Academy's sensational summer exhibit, *Chocolate!* Get your last look at the history and culture of chocolate, and browse the Chocolate Store for an exceptional variety of books, gifts, and candy!

9 FRIDAY

Creature Feature Story Time

See Sept. 2 for details. **10:30 am, Nature Nest.**

Water in the Universe

See Sept. 2 for details. **1 pm, 2nd Floor.**

Science Illustration Demonstration

See Sept. 2 for details. **3 pm; Naturalist Center.**

10 SATURDAY

Creature Feature Story Time

See Sept. 3 for details. **10:30 am, Naturalist Center.**

Water in the Universe

See Sept. 2 for details. **1 pm, 2nd Floor.**

Fantastic Fish Finding

Come get your hands wet and slimy while you identify common fish of the San Francisco Bay. **2–3 pm; Naturalist Center.**

11 SUNDAY

Water in the Universe

See Sept. 2 for details. **1 pm, 2nd Floor.**

15 THURSDAY

Third Thursday

Filled with clownfish, cocktails, conversation, and corals, the Academy after-hours is the place to be on the third Thursday of every month. Musical entertainment and no-host bar. **Free for members, \$5 non-members; 5–9 pm.**

16 FRIDAY

Creature Feature Story Time

See Sept. 2 for details. **10:30 am, Nature Nest.**

Raptor Dinosaurs

A lively presentation for all ages on *Velociraptor* and its close relatives. Examine fossil casts and mechanical models to see what these amazing Cretaceous killers were really like. **11 am & 12 pm; Naturalist Center.**

continued from Friday, September 16

Water in the Universe

See Sept. 2 for details. **1 pm, 2nd Floor.**

Science Illustration Demonstration

See Sept. 2 for details. **3 pm; Naturalist Center.**

17 SATURDAY

Creature Feature Story Time

See Sept. 3 for details. **10:30 am, Naturalist Center.**

Water in the Universe

See Sept. 2 for details. **1 pm, 2nd Floor.**

18 SUNDAY

Water in the Universe

See Sept. 2 for details. **1 pm, 2nd Floor.**

Autumn Overnight at Pepperwood

Overnight field trip. Pre-registration required. See page 4 for information. **2 pm Saturday–noon Sunday; \$50 adults & \$40 children, members; \$60 adults & \$50 children, non-members; Pepperwood Preserve, Santa Rosa.**

19 MONDAY

Dark Energy and the Runaway Universe

Benjamin Dean lecture with Alex Filippenko, Ph.D. See page 4 for information. **7:30 pm; \$4; Jewish Community Center of San Francisco.**

20 TUESDAY

Shells: Windows On Our Past and Future

Lecture with Geerat Vermeij, Ph.D. See page 4 for information. **2 & 7:30 pm; Free for Academy members, \$8 non-members; Sequoia Board Room.**

22 THURSDAY

Fantastic Fish Finding

See Sept. 10 for details. **1:30 pm; Naturalist Center.**

23 FRIDAY

Creature Feature Story Time

See Sept. 2 for details. **10:30 am, Nature Nest.**

Water in the Universe

See Sept. 2 for details. **1 pm, 2nd Floor.**

24 SATURDAY

Latino Heritage Month

Celebrate Latino Heritage with a day of special programs at the Academy. Enjoy serenades performed by the traditional Mexican group *El Trio del Puerto*, and learn how to make Mexican *migajón* – miniature sculptures fashioned from bread dough. The Oscar Reynolds Trio will bring you the traditional sounds and rhythms of Bolivia. **10 am–4 pm.**

Banned Books Week

Until September 30, visit the Academy Library's display of books that have been challenged or banned at other institutions. **10 am–5 pm; Naturalist Center.**

Creature Feature Story Time

See Sept. 3 for details. **10:30 am, Naturalist Center.**

Water in the Universe

See Sept. 2 for details. **1 pm, 2nd Floor.**

25 SUNDAY

Whale Watching in the Gulf of Farallones

Field trip with Academy naturalist Juan-Carlos Solis. See page 4 for information. Reservations are required. **7:30 am–4 pm; \$85; trip departs from San Francisco.**

Water in the Universe

See Sept. 2 for details. **1 pm, 2nd Floor.**

DAILY EVENTS

African Penguin Feedings

Watch as an Academy biologist enters the penguin tank to toss vitamin-stuffed fish to the African penguins. Visitors can ask questions during the feedings. **Every day; 11 am & 3:30 pm.**

See The Unseen

Join an Academy naturalist for a hands-on activity featuring little-seen treasures from the Academy's specimen collection or fascinating live animals. **Every day, 12 pm.**

Aquarium Afternoons

Each day Academy biologists take and test water samples, check filters, clean tanks, and feed your favorite Steinhart animals. Now you can join the adventure every afternoon during special scheduled programs. Different tasks will be performed throughout the week. **Every day, 2 pm.**

Coral Reef Caretaking

Watch as an Academy biologist suits up in SCUBA gear and dives into the Academy's two-story Coral Reef tank to care for the reef's inhabitants. **Mondays & Wednesdays**

Meet the Biologist

Meet an Academy biologist and discover how to care for aquarium creatures. **Tuesdays & Thursdays**

Fish Feeding Frenzy

Watch as an Academy biologist feeds some of your favorite Steinhart residents. **Fridays through Sundays**

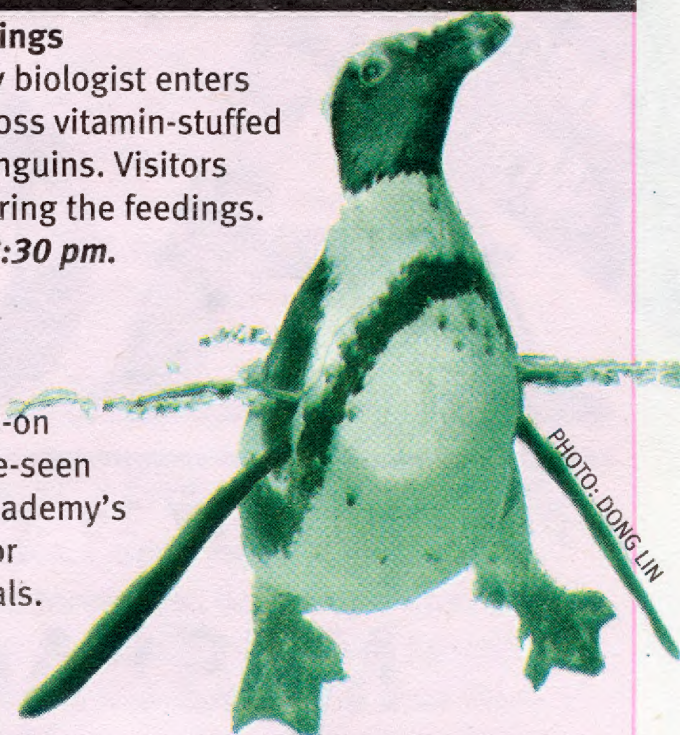


PHOTO: DONG LIN



PHOTO: DONG LIN

29 THURSDAY

Happy Birthday Steinhart!

Steinhart Aquarium is 82 years old today! Help us celebrate with a special birthday cake and a toast from Aquarium Director Chris Andrews. All 82-year olds and their families receive free admission for this day only. **12 pm; Steinhart Aquarium.**

30 FRIDAY

Creature Feature Story Time

See Sept. 2 for details. **10:30 am, Nature Nest.**

Water in the Universe

See Sept. 2 for details. **1 pm, 2nd Floor.**

Science Illustration Demonstration

See Sept. 2 for details. **3 pm; Naturalist Center.**

Fall Stargazing at the SF Botanical Garden

Join Bing Quock of the Academy's Morrison Planetarium as he leads laser-guided stargazing sessions. See page 4 for information. **7:30–9 pm; \$8 single & \$13 family, members; \$12 single & \$18 family, non-members; SF Botanical Garden in Golden Gate Park.**

The Elkus Collection at Sonoma Valley Museum of Art

August 27–October 16, 2005

"The Elkus Collection" exhibition at the SVMA showcases examples of southwestern Native American jewelry, pottery, textiles and paintings on loan from the California Academy of Sciences Department of Anthropology. The exhibition is curated by Senior Anthropology Collections Manager Russ Hartman.

View this outstanding collection and get free entry! Simply show your membership card at the door.

**551 Broadway, Sonoma, California
Open 11 am–5 pm, Wednesday–Sunday.
Visit svma.org or call (707) 939-7862**

1 SATURDAY

Ten Years after the Fire

Family field trip. Pre-registration required. See page 4 for information. 9 am–4 pm; \$30 members, \$40 non-members; **Mount Vision, Point Reyes National Seashore.**

Black Diamond Odyssey

Adult field trip. Pre-registration required. See page 4 for information. 10 am–2 pm; \$30 adults & \$20 children, members; \$40 adults & \$30 children, non-members; **Black Diamond Mines Regional Preserve, Antioch.**

Creature Feature Story Time

Join us for a story-reading session about one of the animals at the Academy. Then, see the real thing as you meet a live animal or examine a scientific specimen. Appropriate for ages 3–7. 10:30 am, *Naturalist Center.*

Water in the Universe

Take a deeper look at the Academy's *Astrobiology* exhibit during these special, spacey presentations. Learn why water is a necessary component for the evolution of life and find out where else in the Universe it might exist. 1 pm, *2nd Floor.*

2 SUNDAY

Water in the Universe

See Oct. 1 for details. 1 pm, *2nd Floor.*

Fantastic Fish Finding

Come get your hands wet and slimy while you identify common fish of the San Francisco Bay. 2–3 pm; *Naturalist Center.*

7 FRIDAY

Creature Feature Story Time

Join us for a story-reading session about one of the animals at the Academy. Then, see the real thing as you meet a live animal or examine a scientific specimen. Appropriate for ages 3–5. 10:30 am, *Nature Nest.*

Water in the Universe

See Oct. 1 for details. 1 pm, *2nd Floor.*

Science Illustration Demonstration

Watch an illustrator create images for use in scientific publications. 3 pm; *Naturalist Center.*

8 SATURDAY

Kayaking Drakes Estero

Field trip. Pre-registration required. See page 4 for information. 9 am–4:30 pm; \$125 members, \$135 non-members; **Drakes Estero, Point Reyes National Seashore.**

Creature Feature Story Time

See Oct. 1 for details. 10:30 am, *Naturalist Center.*

Water in the Universe

See Oct. 1 for details. 1 pm, *2nd Floor.*

10 MONDAY

SETI: Pulling Signals Out of Cosmic Noise

Benjamin Dean lecture. See page 4 for information. 7:30 pm; \$4; **Jewish Community Center of San Francisco.**

14 FRIDAY

Creature Feature Story Time

See Oct. 7 for details. 10:30 am, *Nature Nest.*

Water in the Universe

See Oct. 1 for details. 1 pm, *2nd Floor.*

Science Illustration Demonstration

See Oct. 7 for details. 3 pm; *Naturalist Center.*

SPECIAL OFFER FOR MEMBERS

SHN and Walend Media present *HOLES*, live on stage. Based on the hit movie and Newberry award-winning book, *HOLES* is coming to the Orpheum Theatre in San Francisco September 30–October 9.

Academy members get a \$5 discount when they buy Orchestra Seats for select performances. Call (415) 512-7770 or visit shnsf.com and enter special offer code: CAS

General Information: (415) 321-8000

15 SATURDAY

Creature Feature Story Time

See Oct. 1 for details. 10:30 am, *Naturalist Center.*

Water in the Universe

See Oct. 1 for details. 1 pm, *2nd Floor.*

16 SUNDAY

Water in the Universe

See Oct. 1 for details. 1 pm, *2nd Floor.*

Fantastic Fish Finding

See Oct. 2 for details. 2–3 pm; *Naturalist Center.*

18 TUESDAY

The Removal of Nonnative Trout in Mtn. Lake Ecosyst.

Lecture. See page 4 for information. 2 & 7:30 pm; Free for Academy members, \$8 non-members; *Sequoia Board Room.*

20 THURSDAY

Third Thursday

Filled with clownfish, cocktails, conversation, and corals, the Academy after-hours is the place to be on the third Thursday of every month. Musical entertainment and no-host bar. Free for members, \$5 non-members; 5–9 pm.

21 FRIDAY

Creature Feature Story Time

See Oct. 7 for details. 10:30 am, *Nature Nest.*

Water in the Universe

See Oct. 1 for details. 1 pm, *2nd Floor.*

Science Illustration Demonstration

See Oct. 7 for details. 3 pm; *Naturalist Center.*

22 SATURDAY

A Harvest of Customs: Straw Art From Around the World

Join the Academy for a day of straw art presentations and explore the social customs and folk beliefs associated with wheat, rye and other grains. Sponsored by the American Museum of Straw Art in Long Beach. 10 am–4 pm; **Academy Classroom.**

Raptor Rapture

Field trip. Pre-registration required. See page 4 for information. 10 am–1 pm; \$30 adults & \$20 children, members; \$40 adults & \$30 children, non-members; **Hawk Hill, Marin Headlands.**

Creature Feature Story Time

See Oct. 1 for details. 10:30 am, *Naturalist Center.*

Water in the Universe

See Oct. 1 for details. 1 pm, *2nd Floor.*

28 FRIDAY

Creature Feature Story Time

See Oct. 7 for details. 10:30 am, *Nature Nest.*

Water in the Universe

See Oct. 1 for details. 1 pm, *2nd Floor.*

Science Illustration Demonstration

See Oct. 7 for details. 3 pm; *Naturalist Center.*

Fall Stargazing at the SF Botanical Garden

Join Bing Quock of the Academy's Morrison Planetarium as he leads laser-guided stargazing sessions. See page 4 for information. 7:30–9 pm; \$8 single & \$13 family, members; \$12 single & \$18 family, non-members; **SF Botanical Garden in Golden Gate Park.**

29 SATURDAY

Creature Feature Story Time

See Oct. 1 for details. 10:30 am, *Naturalist Center.*

Water in the Universe

See Oct. 1 for details. 1 pm, *2nd Floor.*

Corporate & Foundation Support

The Academy thanks the following corporations and foundation for their recent generous contributions:

For general operating support, \$10,000 from the **Richard & Rhoda Goldman Foundation**; \$4,000 from the **Schultz Foundation**; and \$2,500 from the **Sidney Stern Memorial Trust.**

For support of the Academy's Biodiversity of Gaoligongshan Project, \$225,000 from the **John D. and Catherine T. MacArthur Foundation.**

For support of the Academy's Lakeside Fellows Program, \$150,000 from the **Lakeside Foundation.**

For support of the Academy Traditional Arts Program's Peruvian and Bolivian Musical Compositions Project, \$35,000 from the **Creative Work Fund.**

For support of education programs, \$10,000 from the **Richard & Rhoda Goldman Foundation.**

New Donor Circle Members

April through June 2005: \$125 to \$999

Many thanks to the following new donors and those who have increased their support of the Academy recently.

Mr. and Mrs. Alan J. Adler, Mr. Ron Appleton and Ms. Susan Tiffany, Mr. and Mrs. Paul L. Armstrong, Dr. and Mrs. William C. Bergman, Mr. James Q. Biggs, Mr. and Mrs. Jim Burroughs, Ms. Christine Considine, Mr. and Mrs. Donald E. Dana, Ms. Shirley B. Dawson, Mr. and Mrs. Sam Ferguson, Mr. Marc A. Franklin, Ms. Alison F. Geballe, Dr. Reese Halter, Mr. Jim Heeger and Ms. Daryl Messinger, Mr. Raleigh E. Hughes, Ms. Dorothy A. Hyde, Mr. and Mrs. Stephen H. Lampen, Dr. and Mrs. Jack Leibman, Mr. and Mrs. Alan C. Miller, Mr. and Mrs. David L. Napier, Mr. Philip Nonneman and Ms. Dawn Williamson, Ms. Joyce Norcini and Ms. Susan Stevenson, Mr. and Mrs. Stephen Robie, Dr. and Mrs. David Sanchez, Jr., Ms. Andrea Schultz, A.W. and W.F. Shelton, Mr. and Mrs. Robert B. Stein, Miss Rachele Sullivan and Ms. Maria Bayog, Dr. Yvonne L. Swift, Mr. and Mrs. Joseph O. Tobin, II, Mr. Richard A. Vignolo, Mr. John A. Weeks, Mr. John R. Wilson, Mr. and Mrs. Joseph A. Woods, Jr., Mrs. Kazuko Zolinsky

Friends of the Academy

April through June 2005

The Academy gratefully acknowledges the following supporters for their recent gifts of \$1,000 and above to the Academy's Annual Fund.

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Academy

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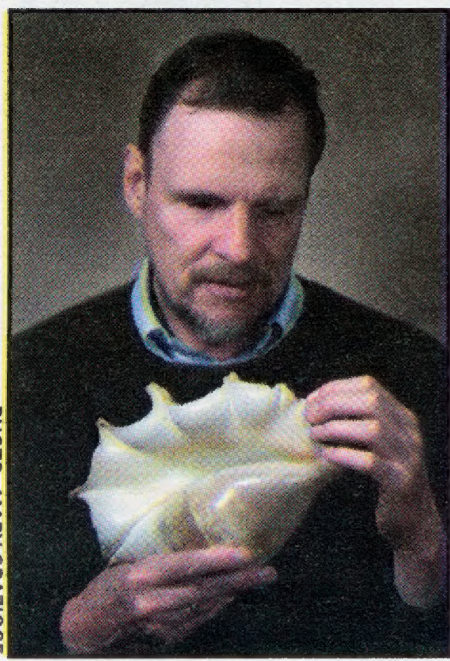
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Shells: Windows On Our Past and Future

Geerat Vermeij, Ph.D., Professor of Marine Ecology and Paleocology, University of California, Davis

As chronicles of life today and in the distant past, the shells of snails, clams and their relatives offer the means to reconstruct the complex relationships between organisms and their surroundings. The history



Geerat Vermeij, Ph.D.

that shells tell is surprisingly similar to our own human history – competition and cooperation shape history, and all the adaptations we see in life's forms and in our own society can be understood in terms of these fundamentally economic processes. By examining and analyzing fossils for evidence of interspecies competition and predation, Vermeij has prompted the field of paleobiology to acknowledge the profound influences creatures have on fashioning each other's evolutionary fates.

Tuesday, September 20, 2 & 7:30 pm

The Removal of Non-native Trout in Mountain Lake Ecosystems

Roland Knapp, Ph.D., Sierra Nevada Aquatic Research Lab

Historically, the majority of mountain lakes worldwide were naturally fishless and harbored a unique vertebrate and invertebrate fauna.

However, during the past century, intentional fish introductions have profoundly altered these sensitive ecosystems by extirpating native fauna and reconfiguring ecosystem processes. The severity of these impacts is now widely recognized, and has prompted increasing interest in restoring some mountain lakes to their natural fishless condition. Will these systems recover to their original state following fish removal?

Tuesday, October 18, 2 & 7:30 pm



Roland Knapp, Ph.D.

Morrison Planetarium's Benjamin Dean Lecture Series

Dark Energy and the Runaway Universe

Alex Filippenko, Ph.D., University of California, Berkeley

There is now strong evidence that, over the largest distances, our Universe is dominated by "dark energy" that makes space expand faster and faster with time. Einstein postulated "cosmic antigravity" of this type in 1917; ironically, he later retracted the idea as his "biggest blunder."

Monday, September 19, 7:30 pm

SETI: Pulling Signals Out of Cosmic Noise

Jill Tarter, Ph.D., Director, Center for SETI Research

SETI could succeed tomorrow, or it may be an endeavor that lasts for multiple generations. Recent workshops have laid out a roadmap for the next few decades. Three different approaches were identified: continue and expand the radio search; begin searches for very fast optical and infrared pulses from a million stars; and eventually build an omni-directional sky survey array capable of detecting strong, transient, radio signals from billions of stars.

Monday, October 10, 7:30 pm

i These lectures will take place in the Sequoia Board Room at the California Academy of Sciences. Tickets are free for Academy members and \$8 for non-members. Tickets can be purchased by calling (415) 321-8000 or at the door, when available.

i These lectures will take place at the Jewish Community Center of San Francisco at 3200 California Street at Presidio Avenue. Tickets are \$4 each, and can be purchased by calling (415) 321-8000 or at the door, when available. For more information or to request a brochure, call (415) 321-8000.

This series is made possible by the generosity of the Benjamin D. Dean Endowment Fund.

Adult and Family Courses

Autumn Overnight at Pepperwood

Overnight Field Trip with Michael Gillogly and Ginger Parish
Celebrate fall at Pepperwood Preserve in Santa Rosa. Begin with an afternoon hike to explore a redwood forest, meadows, and oak woodlands. After a potluck dinner, gather for an old-fashioned campfire program with stories and a sing-along. Choose to camp near the property's cottage or sleep indoors. After breakfast, take a stroll to investigate a nearby pond where reptiles and amphibians abound. Suitable for families with children of all ages.

**September 17-18;
2 pm Sat.-Noon Sun.
Pepperwood Preserve,
Santa Rosa;
\$50 adults & \$40 children,
members; \$60 adults &
\$50 children, non-members.**



PHOTO: CAS EDUCATION STAFF

Kayaking Drakes Estero

Adult Field Trip with David Wimpfheimer

Glide silently past thousands of ducks, grebes, loons, shorebirds, and other waterbirds in one of Point Reyes' most pristine estuaries during its warmest and calmest season. At a remote landing, take a short walk as migrant raptors fly overhead and harbor seals return curious glances from the water. No prior kayaking experience is necessary, and all equipment is provided for this tranquil five-mile paddle. Full instruction is given before departure in stable double

sea kayaks. Suitable for adults ages 16 and up.

**Saturday, October 8, 9 am-4:30 pm
Drakes Estero, Point Reyes National Seashore
\$125 members, \$135 non-members**

Ten Years after the Fire

Adult Field Trip with David Wimpfheimer

In 1995, a wildfire that started on Mount Vision raged for several days, burning more than 12,000 acres of Point Reyes National Seashore. Since then, the regeneration of the Bishop pine habitat has been dramatic. On the tenth anniversary of this fire, discover how the plant and animal communities have changed on an eight-mile loop hike with moderate elevation gain. This time of year is ideal for observing migrant raptors and other birds, and the clear fall weather offers awesome views from the ridge. Suitable for adults and teens ages 15 and up.

**Saturday, October 1, 9 am-4 pm
Mount Vision, Point Reyes National Seashore
\$30 members, \$40 non-members**

Black Diamond Odyssey

Family Field Trip with Juan-Carlos Solis

Journey above and below the earth at Black Diamond Mines, the Bay Area's only mining and underground regional preserve. Explore California's rich chaparral and oak-woodland ecosystems to look for birds, bugs, reptiles, and a variety of tracks from animals such as raccoons and bobcats. Afterwards, join park naturalists to take a subterranean walk through this unique underground preserve, located 400 feet below the ground. See 50-million-year-old marine fossils and mining features, including ore chutes, mine shafts, and an office from the 1920s. Suitable for families with children ages seven and up.

**Saturday, October 1, 10 am-2 pm
Black Diamond Mines Regional Preserve, Antioch
\$30 adults & \$20 children, members
\$40 adults & \$30 children, non-members**

Raptor Rapture

Family Field Trip with Bart Kowalski

Every fall, thousands of birds of prey fly right over the Marin Headlands on their migration south. Red-tailed, sharp-shinned, and Cooper's hawks are common flyers-by over Hawk Hill, where peregrine falcons and golden eagles also soar. Learn to differentiate between buteos, accipiters, and falcons, and apply your skills in one of the best places to view raptors on the West Coast! Suitable for families with children ages six and up.

**Saturday, October 22, 10 am-1 pm
Hawk Hill, Marin Headlands
\$30 adults & \$20 children, members
\$40 adults & \$30 children, non-members**



Red-tailed hawk; *Buteo jamaicensis*

i Pre-registration is required for all courses. For more information, call (415) 321-8000, e-mail edregistrar@calacademy.org, or visit www.calacademy.org/education.

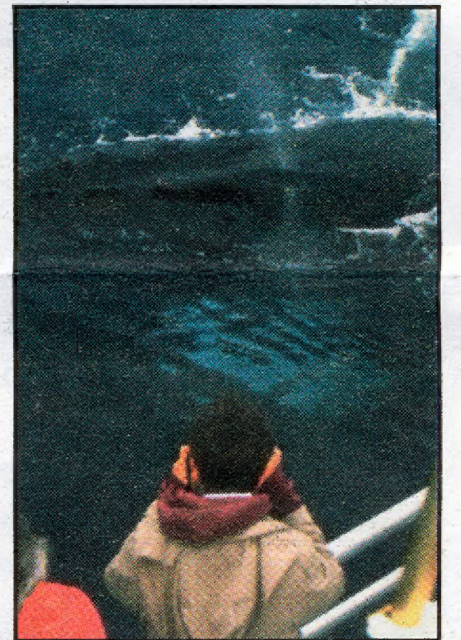
Whale Watching in the Gulf of Farallones

Field Trip with Juan-Carlos Solis

Join the Academy and the Oceanic Society on an expedition to search for whales and other marine mammals near the Farallon Islands. The Farallon Islands, just twenty-seven miles off of San Francisco, lie within the Gulf of the Farallones National Marine Sanctuary, a food-rich marine ecosystem that attracts whales, dolphins, seals and seabirds each summer and fall. Spot a number of marine mammals, as well as different species of seabirds and sea lions, including the massive and rare Steller's sea lion.

Sunday, September 25; 7:30 am-4 pm

**Trip departs from San Francisco;
\$80 members, \$85 non-members;
Reservations required by September 23.**



i For reservations and detailed field trip information, call (415) 321-8000.

Fall Stargazing at the SF Botanical Garden

In a program jointly sponsored by the Academy and the San Francisco Botanical Garden at Strybing Arboretum, join Bing Quock of the Academy's Morrison Planetarium as he leads laser-guided stargazing sessions on the dark, peaceful grounds of the San Francisco Botanical Garden in Golden Gate Park. Bing will point out constellations and visible planets, then – using a telescope – search for celestial treasures among the stars, including nebulae, star clusters, and the Andromeda Galaxy. Satellites can occasionally be seen orbiting overhead, gliding silently against the stars, and if you're lucky, you might even see a meteor or two. Dress warmly, bring binoculars, a flashlight (preferably with a red filter to preserve night vision), and your curiosity about the night sky. This program will be cancelled in the event of overcast weather.

Friday, September 30, 7:30-9 pm &

Friday, October 28, 7-8:30 pm;

Each session: \$8 single & \$13 family (2 adults, 2 children), members; \$12 single & \$18 family, non-members; SF Botanical Garden in Golden Gate Park

i Reservations recommended: (415) 661-1316, x 354